Hail to the Thief: Linguistic Agency Increases the Persuasive Power of Consumer Education Materials about Identity Theft

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Dramatic increases in the incidence and severity of identity theft have prompted many observers to characterize the problem as an “epidemic.” Combating the threat will require a multimodal intervention of new technologies, innovative business practices, a strengthened legislative framework, more engagement from law enforcement, and expanded victim assistance. It will also require comprehensive consumer education about the nature of the crime and measures people can take to reduce their vulnerability to it. In this respect, intervention efforts might benefit from the lessons learned in education campaigns about actual epidemiological threats such as influenza or HIV/AIDS.

Healthcare practitioners rely extensively upon educational materials to inform the public about epidemiological and prevention measures (Schwartzberg, Cowett, & VanGeest, 2007). Such materials can take the form of physical leaflets and posters or digital documents disseminated via email and the internet. These materials, which can be used alone or to reinforce provider counseling, have been shown to significantly reduce people’s susceptibility to epidemic threats (Johansson, Salantera, Katajisto, & Leino-Kilpi, 2004).

Message design is at the core of health education campaigns (Cho, 2012; Maibach & Parrott, 1995). Health educators spend considerable time constructing persuasive messages about health threats, prevention measures, and treatments for medical conditions. When doing so, they often turn to research on message effects – i.e., empirical demonstrations of persuasive message features on attitude and behavioral change (e.g., Ajzen, 1991; Bandura, 1998).

One variable that has received recent attention from message effect researchers is linguistic agency (McGlone, Bell, Zaitchik, & McGlone, 2013). Linguistic agency is defined as the ascription of action or change to one or more entities involved in an event. For example, a flu sufferer might assign agency to herself (e.g., I came down with the flu) or to the illness (e.g., the flu laid me out for days). The ascription of causality to an entity involved in an event, such as a disease, implies passivity of other entities in the same event (Dowty, 1991). Thus, the assignment of agency to a health threat implicitly conveys the notion that people who have been “afflicted” have limited control over their circumstances.
The differing conceptions of a health threat that result from ascriptions of agency shape message recipients’ perceptions of the threat. McGlynn, Bell, Zaitchik, and McGlynn (2013) found that assignment of agency to a virus (in this case, the H1N1 virus) rather than to people heightened message recipients’ beliefs about the severity of the virus, their perceived susceptibility to it, and their intention to seek vaccination. Bell, McGlyne, and Dragojevic (2013a) assessed the effects of linguistic agency assignment in messages about four unique bacterial threats. People who read a warning about a bacterial threat rated the threat as more severe and self as more susceptible when agency was assigned to the bacterium (e.g., \textit{STEC kills people every day}) than to humans (e.g., \textit{people die from STEC every day}). Bell, McGlyne, and Dragojevic (2013b) examined linguistic agency effects in the context of health policy editorial advocating mandatory vaccination of girls and boys against the human papilloma virus (HPV). Research participants perceived HPV to be more severe when agency was assigned to it (e.g., \textit{HPV infects millions of people}) rather than to humans (e.g., \textit{millions of people contract HPV}). In addition, the HPV vaccine was perceived to be more effective when agency was assigned to it (e.g., \textit{vaccination guards people from HPV}) than to the vaccinated person (e.g., \textit{people can guard themselves from HPV with vaccination}).

McGlynn (2014) thus examined the effects of agency assignment for a nonliving health threat, radon gas. They found that the agency experimental manipulation needed to assign sentience (i.e., intentionality) to radon gas to produce a significant effect on perceptions of the threat. For example, a literal description of radon gas dissemination into a home (e.g., \textit{Radon gas seeps into people’s homes}) was less effective than a figurative portrayal of the gas as deliberately targeting a home (\textit{Radon gas invades people’s homes}).

Messages warning people about the threat of identity theft need not rely on figurative portrayals of sentience, of course; the individuals and groups who commit this crime are literally and intentionally targeting their victims. However, inspection of the various online resources designed to educate consumers about this crime reveals a pattern of “nominalization” that can potentially undermine the persuasive force of these resources. Nominalization occurs when descriptions of activity, typically performed by action verbs (\textit{evaluate, invade, etc.}) are instead articulated as abstract nouns (\textit{evaluation, invasion, etc.}). Although nominalization is a natural and common language phenomenon, its effect on discourse is often to attenuate the sense of agency associated with an activity. To illustrate, consider the following nominalized activity descriptions:

- \textit{There was a discussion about raising the minimum wage.}
• An investigation revealed that building inspectors were bribed to overlook code violations.

• The attack killed 50 people.

In each case, causation is linguistically assigned to the activity itself (discussion, investigation, attack) instead of the actual agent(s) who performed the action (legislators discussing policy, police officers investigating a crime, or terrorists preying on a village), who are omitted entirely from the description. The replacement of these “true agents” with nominalizations artificially distances readers from the activities these sentences describe.

The term “identity theft” is also a nominalization. Below are several examples of its usage in a 2012 publication by the Federal Trade Commission titled “Talking about Identity Theft: A How-To Guide”:

• Identity theft occurs when someone uses your personally identifying information to commit fraud or other crimes.

• You or someone you know may have experienced some form of identity theft.

• Awareness is an effective weapon against identity theft.

• Helping employees fight identity theft makes good business sense.

The term appears 125 times in the 53-page pamphlet, roughly four times as often as any reference to an identity “thief” or “thieves” (34 instances). A comparable partiality for the nominalized term is apparent in online resources about cybercrime created by the U.S. Department of Justice (http://www.justice.gov/criminal/fraud/websites/idtheft.html) and Federal Bureau of Investigation (http://www.fbi.gov/about-us/investigate/cyber/identity_theft). Although all of these resources offer valuable advice to consumers about how to avoid becoming a victim of this crime, overreliance on the nominalized term detracts from their persuasive force.

Psychological studies of human responses to threat indicate that we consider threats to be the most severe and ourselves as most susceptible to them when we can transparently perceive it as deriving from an antagonist – i.e., an agent that intentionally and actively seeks to do us harm (e.g., Lazarus, 1991). Thus by characterizing a criminal threat chiefly in terms of an abstraction called “identity theft,” the FTC guide artificially mutes perceptions of the threat posed by the agents who perform the actual criminal activity. To illustrate, compare the example sentences above to the versions below in which agency is restored:

• Identity thieves steal your personally identifying information to commit fraud and other crimes.

• You or someone you may know may have been the victim of an identity thief.

• Awareness is an effective weapon against identity thieves.

• Helping employees fight identity thieves makes good business sense.
These versions convey the same information as their nominalized counterparts, but in a way that expresses the inherent antagonism of the crime more directly.

The purpose of the reported research was to demonstrate the difference in persuasive impact between consumer education materials that employ agentic or nominalized descriptions of identity theft. We hypothesized that materials employing agentic descriptions of the crime would create stronger perceptions of personal susceptibility and intentions to take preventative action than materials referring to the crime in nominalized form. To test this hypothesis, we created different versions of a consumer education “fact sheet” that defined the crime, provided recent statistics about its incidence and associated costs, and offered advice for how consumers can protect themselves from its occurrence. One version of this sheet referred to the crime consistently using agentic descriptions of the criminal activity (e.g., *Identity thieves can ruin your credit and your reputation*) and the other consistently employed the nominalized term for the activity (e.g., *Identity theft can ruin your credit and your reputation*). Each sheet version was approximately 300 words long and contained 16 distinct references to the activity (see Figures 1 and 2).

Participants for our study were recruited through a post on Mechanical Turk (MTurk; www.mturk.com), an online platform owned by Amazon.com. MTurk is a crowdsourcing labor market in which employers ("requesters") post small human intelligence tasks ("HITs") and employees ("workers") perform those tasks for compensation (in this case, $0.50 for a 15-minute time commitment). 486 participants were randomly assigned to read one of the aforementioned fact sheet versions and afterwards completed a questionnaire assessing their beliefs and attitudes regarding identity theft. Analyses of the questionnaire responses indicated three statistically significant differences between the responses generated by participants exposed to the different sheet versions. Specifically, participants who read the agentic description ("identity thief") version a) perceived the threat of identity as more severe, b) perceived themselves as more personally susceptible, and c) reported stronger intentions to take preventative action than participants who read the nominalized activity ("identity theft") version. These findings support our hypothesis that agentic descriptions of identity theft portray the crime in a way that makes consumers more apprehensive about the prospect than nominalized descriptions, and thus more inclined to engage in behaviors that will reduce their susceptibility to this crime. The implications of these findings for the development of educational materials are clear: consumers are more apprehensive about a tangible “thief” than an abstract “theft,” and this subtle but nonetheless significant linguistic difference can be used to enhance the persuasive impact of cybercrime information campaigns.
References


Figure 1. Agentic Description (“Identity Thief/Thieves”) Version of the Fact Sheet.

IDENTITY THIEVES ARE BECOMING COMMON AND COSTLY
HOW CAN YOU PROTECT YOURSELF FROM THEM?

Who is an Identity Thief?
An identity thief is a criminal who wrongfully obtains someone else’s personal data, typically for economic gain. Most identity thieves illegally acquire credit card information (about 2 in 3 cases). But sometimes thieves gain access to a bank account or to personal information like a social security number or driver’s license number.

In one notorious case, an identity thief misappropriated $100,000 in credit card advances. Although the victim spent four years and over $15,000 restoring his credit and reputation, the thief served only a minor criminal sentence and paid no financial restitution whatsoever.

In 2012, identity thieves stole approximately $350 in out-of-pocket expenses from the average victim. In addition to the financial loss, an identity thief can also rob the victim of significant time and effort spent repairing the damage caused by the thief to a credit rating and other aspects of one’s reputation. The average victim can expect to spend about 12 hours recovering from the consequences of an identity thief.

How Common Are Identity Thieves?
Identity thieves are quickly becoming the most common and costly criminals in the United States.

- The Federal Trade Commission has received more consumer complaints about identity thieves than any other topic for 13 years in a row.
- In 2012, approximately 12.6 million people in the U.S. were targets of identity thieves.
- The estimated total financial loss caused by these thieves was over $20 billion.
- People between the ages of 18 and 24 are the most likely to be targeted by identity thieves. Members of this age group are especially vulnerable because they frequently post personal information on the internet and conduct financial transactions (banking, credit card purchases, etc.) online.

How Can You Protect Yourself from Identity Thieves?
Being aware of the risks is critical for protecting yourself from identity thieves. Sharing any sensitive personal or financial information with another party can increase your risk. Consequently, it is important to keep close tabs on this information and be choosy about who you share it with.

- One way to discourage identity thieves is to create strong passwords (consisting of numbers, letters, and symbols) for gaining access to sensitive information and to change them frequently.
- A second way is to use antivirus software on all of your computers. These programs can prevent malicious “keylogging” programs from detecting sensitive information you enter on your computer, which in turn can be used by identity thieves.
- Third, you can reduce your vulnerability to thieves by only downloading files only from trusted online sources.
- Finally, you should regularly and frequently check your bank and credit card accounts for unauthorized activity. By doing so, you can stop thieves who access your accounts before they do too much damage.

IDENTITY THIEVES CAN DESTROY YOUR CREDIT AND YOUR REPUTATION.
DON’T LET THEM DESTROY YOU!
**Figure 2.** Nominalized Description (“Identity Theft”) Version of the Fact Sheet.

IDENTITY THEFT IS BECOMING COMMON AND COSTLY
HOW CAN YOU PROTECT YOURSELF FROM IT?

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In one notorious case of identity theft, $100,000 in credit card advances was misappropriated. Although the victim spent four years and over $15,000 restoring his credit and reputation, the theft resulted in only a minor criminal sentence and no financial restitution whatsoever.

In 2012, identity theft cost approximately $350 in out-of-pocket expenses for the average victim. In addition to the financial loss, an identity theft can also cost the victim considerable time and effort spent repairing the damage caused by the theft to a credit rating and other aspects of one’s reputation. The average victim can expect to spend about 12 hours recovering from the consequences of an identity theft.

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